

Title (en)
DIAGNOSTIC APPARATUS AND METHOD FOR COOLANT CONTROL VALVE

Title (de)
DIAGNOSEVORRICHTUNG UND -VERFAHREN FÜR KÜHLMITTELREGELVENTIL

Title (fr)
APPAREIL DE DIAGNOSTIC ET PROCÉDÉ DE SOUPAPE DE RÉGULATION DE LIQUIDE DE REFROIDISSEMENT

Publication
EP 3260679 A1 20171227 (EN)

Application
EP 16189651 A 20160920

Priority
KR 20160076533 A 20160620

Abstract (en)
A diagnostic apparatus for a coolant control valve including a housing having a plurality of ports, a valve member provided to be rotatable in the housing, and a driving device rotating the valve member between two end positions, the diagnostic apparatus including at least one position sensor provided on an external surface of the housing for sensing a position of the valve member, a determination device for determining whether or not the valve member is stuck using the position of the valve member sensed by the position sensor and a controller for controlling the driving device.

IPC 8 full level
F01P 11/14 (2006.01); **F01P 7/14** (2006.01); **F01P 7/16** (2006.01)

CPC (source: EP KR US)
F01P 7/14 (2013.01 - KR); **F01P 7/16** (2013.01 - EP US); **F01P 11/14** (2013.01 - EP KR US); **F16K 11/085** (2013.01 - US); **F16K 31/041** (2013.01 - US); **F16K 37/0083** (2013.01 - US); **F01P 2007/146** (2013.01 - EP KR US); **F01P 2031/00** (2013.01 - US); **F01P 2031/20** (2013.01 - KR); **F01P 2031/34** (2013.01 - EP KR US); **F01P 2060/04** (2013.01 - EP US); **F01P 2060/08** (2013.01 - EP US)

Citation (search report)

- [XYI] US 2016047292 A1 20160218 - GONZE EUGENE V [US], et al
- [XY] WO 2016026903 A1 20160225 - BAYERISCHE MOTOREN WERKE AG [DE]
- [A] EP 2587017 A1 20130501 - MAN TRUCK & BUS AG [DE]
- [A] WO 2015155964 A1 20151015 - DENSO CORP [JP] & EP 3130777 A1 20170215 - DENSO CORP [JP]
- [A] US 2002179165 A1 20021205 - HU FUZHENG [CA], et al

Cited by
US11473859B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3260679 A1 20171227; EP 3260679 B1 20210616; KR 101816413 B1 20180108; KR 20170142674 A 20171228; US 2017362993 A1 20171221; US 9951676 B2 20180424

DOCDB simple family (application)
EP 16189651 A 20160920; KR 20160076533 A 20160620; US 201615259838 A 20160908